

MARCH

at the

CALIFORNIA ACADEMY OF SCIENCES

MARCH MEETING

DATE: Wednesday, March 17, 8:15 p.m.
PLACE: Morrison Auditorium
SPEAKER: Robert C. Hermes
SUBJECT: "DELTA OF THE ORINOCO"

Mr. Hermes is known to much of the membership through his previous appearances at the Academy. In this, the last in the current series of Audubon Screen Tours, he takes his audience to the Orinoco Delta in Venezuela, a vast area of swamps and jungles and one of the few remaining untouched natural regions of the world. Mr. Hermes spent three months in this rugged and beautiful country recording on color film its wildlife and plant life. One full month of that time was spent 40 miles from the nearest habitation, photographing nesting hoatzins, the great aruco, and the lovely morpho butterflies.

Also to be seen are magnificent jungle birds in courtship, a visit with the ingenious mud dauber wasp; water chestnuts in flower; tropical hummingbirds; and the intriguing and strange four-eyed fish, anableps, with which Steinhart Aquarium visitors are familiar.

Too, there is unusual footage of macaws, sloths, toucans and other tropical creatures.

Mr. Hermes last appeared at the Academy in January 1963.

MORRISON PLANETARIUM

Beginning March 3 and playing through March 28, the Theatre of the Stars presents "OUR AMAZING MOON." Was the moon once a part of the earth? Why does it always show the same face to us? What caused the fantastic crater system?

Performances daily at 3:30 p.m., with evening shows, Wednesday through Sunday, at 8:30. Extra matinees at 2:00 on Saturday and Sunday. The Planetarium is closed on Monday and Tuesday evenings.

MORRISON AUDITORIUM

The California Academy of Sciences Science Theatre continues to present its documentary film, "THE SEA OF CORTEZ," on Saturdays and Sundays at 12:45, 2:15, and 3:45 p.m. Admission: Adults, 75c, Juniors, 40c.

SPECIAL EXHIBITS

Exhibit of the Month: "FLOWERS IN THE WOOD," specimens of strange parasitic growths from Mexican trees. From the Academy collections. Main Foyer, Science Museum.

"CALIFORNIA NATURE IN PHOTOS" by Mr. Ken Legg, black-and-white pictures of a variety of subjects. Lovell White Hall of Man and Nature. Extends through March 31.

"SCIENCE IN ACTION" (Schedule for viewers in the San Francisco Bay Area: Tuesday evenings, 6:30 p.m., KTVU-TV, Channel 2. For other areas, see the TV listings in your local paper).

March 9: "PATTERNS AND DESIGNS," with Guest Scientist, R. Buckminster Fuller, Southern Illinois University.

March 16: "SCIENCE OF SWIMMING," with George Haines, Coach, Santa Clara Swim Club.

March 23: "THE IRON COW," with Dr. Clay Kempf, Research and Development, Foremost Dairies, Inc.

March 30: "MUSICAL SOUNDS," with Dr. Harvey E. White, Director of the Lawrence Hall of Science, University of California.

NEWS and NOTES

MEARL F. CARSON, Curator of Exhibits, in company with Timothy J. O'Leary, an Assistant in the Department, journeyed to Washington, D. C. on January 31 for a week's tour and inspection of various components of the Smithsonian Institution. In the Museum of History and Technology, the Museum of Natural History, and the National Air Museum, they spent hours in exhibit preparation laboratories, examining new techniques using such materials as plastics and fibre glasses, and witnessing new preservation methods for freezing both vertebrates and invertebrates. One of the highlights of the trip, according to Mr. Carson, was an introduction to a new photographic silk-screening process used for exhibit illustrations and display labels.

Before returning to San Francisco, one day was spent in Colorado at the Denver Museum of Natural History primarily to see the fossil and mineral halls. Their counterparts at the CAS are due for an extensive renovation in the near future.

ON MARCH 7, the California Botanical Club which meets regularly at the Academy, will enter its 75th year of existence, having been established in 1891. During the months of the diamond

anniversary, several publications including special issues of *Leaflets of Western Botany* are planned, as well as extra meetings celebrating the Club's hale and hearty longevity. And speaking of birthdays . . .

MEMBERS OF THE STAFF would like to join other hundreds of his friends in saluting Dr. C. M. Goethe of Sacramento on the occasion of his natal day which occurs March 28. He will be 90 years old. Dr. Goethe, a Patron of the CAS, has for most of his life thoroughly enjoyed an active and deep-felt interest in natural history, particularly that of California, and has generously supported the Academy in a multitude of ways. This enthusiasm for the Academy was shared equally by his wife, the late Mary Glide Goethe.

Happy Birthday, Dr. Goethe, Happy Birthday to YOU!

ARMED WITH A MINE DETECTOR and various hand magnets, Tom Gates, Manager of the Planetarium, Clay P. Butler, Research Associate in Astronomy, and Michael Bennett of the Planetarium Staff, took a field trip on February 9 to Oroville, California and the meadow in which the Oroville meteorite, on permanent display at the Academy, was discovered in 1892. They covered not only that particular area but also some nearby Indian caves in the hope of discovering additional specimens for the Academy collections.

Several small "suspicious-looking" fragments were brought back but as of this writing no determination has been made as to their authenticity. The trip is but one of several which are planned for the future.

RECENT SCIENTIFIC PUBLICATIONS of the

CALIFORNIA ACADEMY OF SCIENCES

PROCEEDINGS:

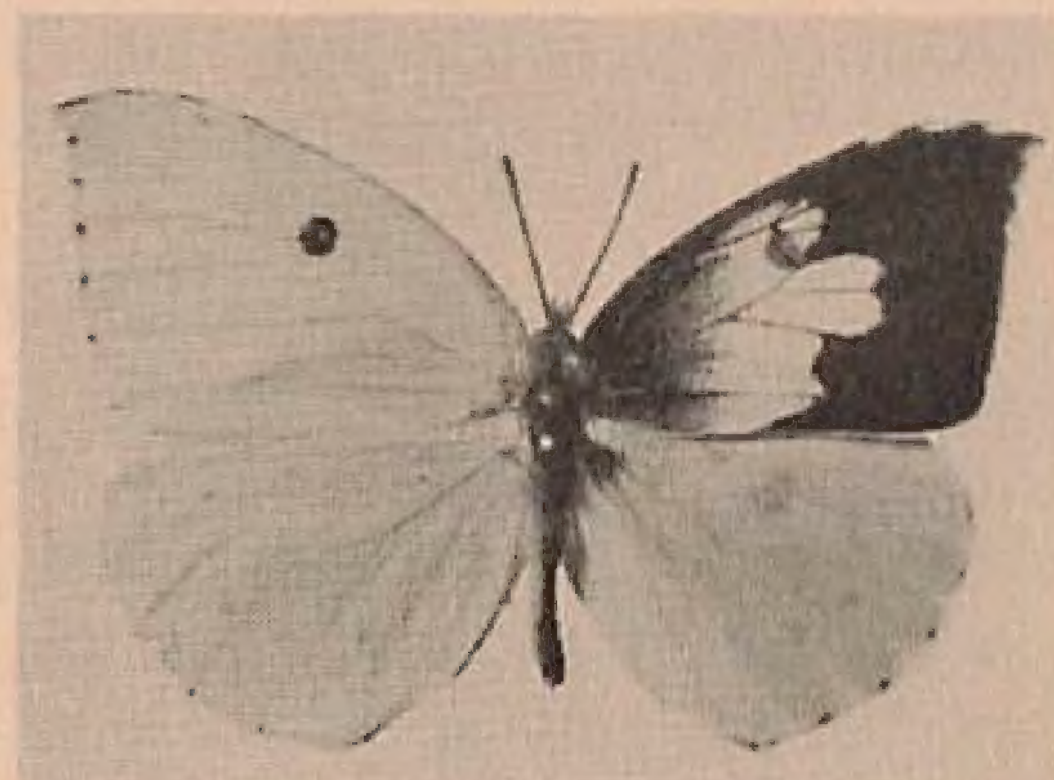
"OSTEOLOGICAL CHARACTERISTICS AND AFFINITIES OF THE HEXAGRAMMID FISHES, WITH A SYNOPSIS." Jay C. Quast. Vol. XXXI, No. 21. January 15, 1965. \$1.00

"REESTABLISHMENT OF THE NORTHERN ELEPHANT SEAL (*MIROUNGA ANGUSTIROSTRIS*) OFF CENTRAL CALIFORNIA. Keith W. Radford, Robert T. Orr, and Carl L. Hubbs. Vol. XXXI, No. 22. January 15, 1965. 50c

"ON AMPHISBAENA HEATHI SCHMIDT AND A. CARVALHOI, NEW SPECIES, SMALL FORMS FROM THE NORTHEAST OF BRAZIL (AMPHISBAENA: REPTILIA)." Carl Gans. Vol. XXXI, No. 23. January 15, 1965. 50c

"BEHAVIOR AND NATURAL REACTIONS OF THE NORTHERN ANCHOVY, *ENGRAULIS MORDAX* GIRARD, UNDER THE INFLUENCE OF LIGHT OF DIFFERENT WAVE LENGTHS AND INTENSITIES AND TOTAL DARKNESS." Anatole S. Loukashkin and Norman Grant. Vol. XXXI, No. 24. January 15, 1965. \$1.50

FROM THE ACADEMY COLLECTIONS



A gynandromorph is an animal having characteristics of both sexes. If these features are divided left and right down the center of the body, the specimen is a bilateral gynandromorph. Obviously, the most spectacular of these appear in species having striking contrast in the appearance of the sexes.

The Entomology Department's most notable gynandromorph is the above-pictured specimen of the California Dog-face, *Colias (Zerene) eurydice* Boisduval, a species which, unknown to most Californians, has been designated State Butterfly. On its left side the rare specimen is a typical female — plain yellow with a black "eye" spot; on its right it displays the male wing pattern — a yellow-on-black profile of a dog's face.

If in 1855, the species' author, Boisduval, had seen such a gynandromorph he wouldn't have made the mistake of giving a distinct name for each sex of the species. He named the female of the species *lorquini* after Pierre Lorquin, the collector of his specimens. Lorquin had come to California in the early 1850s, not as a gold seeker, but as a butterfly hunter hoping to sell his specimens to European friends. California in those days was practically *terra incognita* to the scientific world and most common California butterflies were first known from Lorquin's collections sent to his Parisian physician, J. A. Boisduval.

Our spectacular gynandromorph might have been a mere passing bit of animation were it not for the special interest of a Miss Janet Riddell, an English domestic. When not cooking, her hobby was collecting aberrations of the California Dog-face butterfly and each summer for 12 years she spent a vacation period in a favorite spot in the San Bernardino Mountains where the butterflies were plentiful and highly variable. Over the years she assembled the finest collection of diverse forms of the species. Her collection came to the Academy in 1941 as a bequest.

The gynandromorph was Miss Riddell's most prized specimen, and its capture, as she described it,

the most exciting event of her life: "I noticed a butterfly getting moisture. It looked rather pale on the underside, and thinking it was perhaps a freak male, I crept up and succeeded in getting it. On taking it from the net, and opening the wings with my forceps I experienced the greatest surprise in all of my years of collecting. There in my hand lay a perfect gynandromorph! Collecting was over for the day!"

EDWARD S. ROSS

(Photo by Maurice Giles, CAS)

EARL W. SMITH

SEPTEMBER 30, 1900 — JANUARY 20, 1965

As Chief Operating Engineer, Mr. Smith for many years supervised faithfully the diverse activities necessary in keeping the Academy's doors open and the entire complex in operation. Quiet and unassuming, he was part of the heartbeat of the CAS. His loss is felt deeply by his co-workers on the staff.

NEW MEMBERS OF THE ACADEMY

Regular Membership

Mr. Edgar C. Altermatt
Mr. Ernest Baur, Jr.
Mr. Ronald Bertuccelli
Mr. George Brady
Mrs. Ruth Brill
Mr. Philip C. Carlstroem
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Miss Isabel de Cremer
Mr. Newton B. Drury, Jr.
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Mr. John H. Jacoby
Miss Eleanor Jewell
Mr. Sheldon J. arlan
Mr. Charles F. Livingston
Mr. John Terence Lyttle
Mr. Robert L. Mather
Miss Thelma McWhirter

Family Membership

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Mr. & Mrs. O. J. Hermann, Jr.
Mr. & Mrs. Leavins W.
Hinnenberg
Mr. & Mrs. Edward A.
Horstman

Contributing Membership

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Student Membership

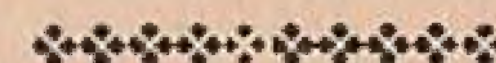
Bruce Bover
Victoria Cole
Alan Foster
Lawrence Goldberg
Michael Guinasso
Dan Hino
Dennis Ho
Michael Lobao

Miss Mary J. Moline
Mr. George W. Moore
Mr. Jack D. Mount
Mr. Louis F. Nagel
Mr. Harry C. Neale
Mr. Malcolm A. Nobs
Rancho Santa Ana
Botanic Garden
Mr. Charles M. Richards
Mrs. George S. Reppas
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Mr. Harold Ruebenack
Mr. John D. Scanlon
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Mr. M. J. Sierka
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Mr. Dave Van de Mark
Mr. George H. Ward
Mr. Loyal A. Weitz
Miss Jeannette M. Witbeck

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Mr. Gene Krummel
Mr. & Mrs. Alan R. Lakein
Mr. Otto S. Swenson
Mr. Paul A. White

Life Membership

Mr. Thomas Reams Parker



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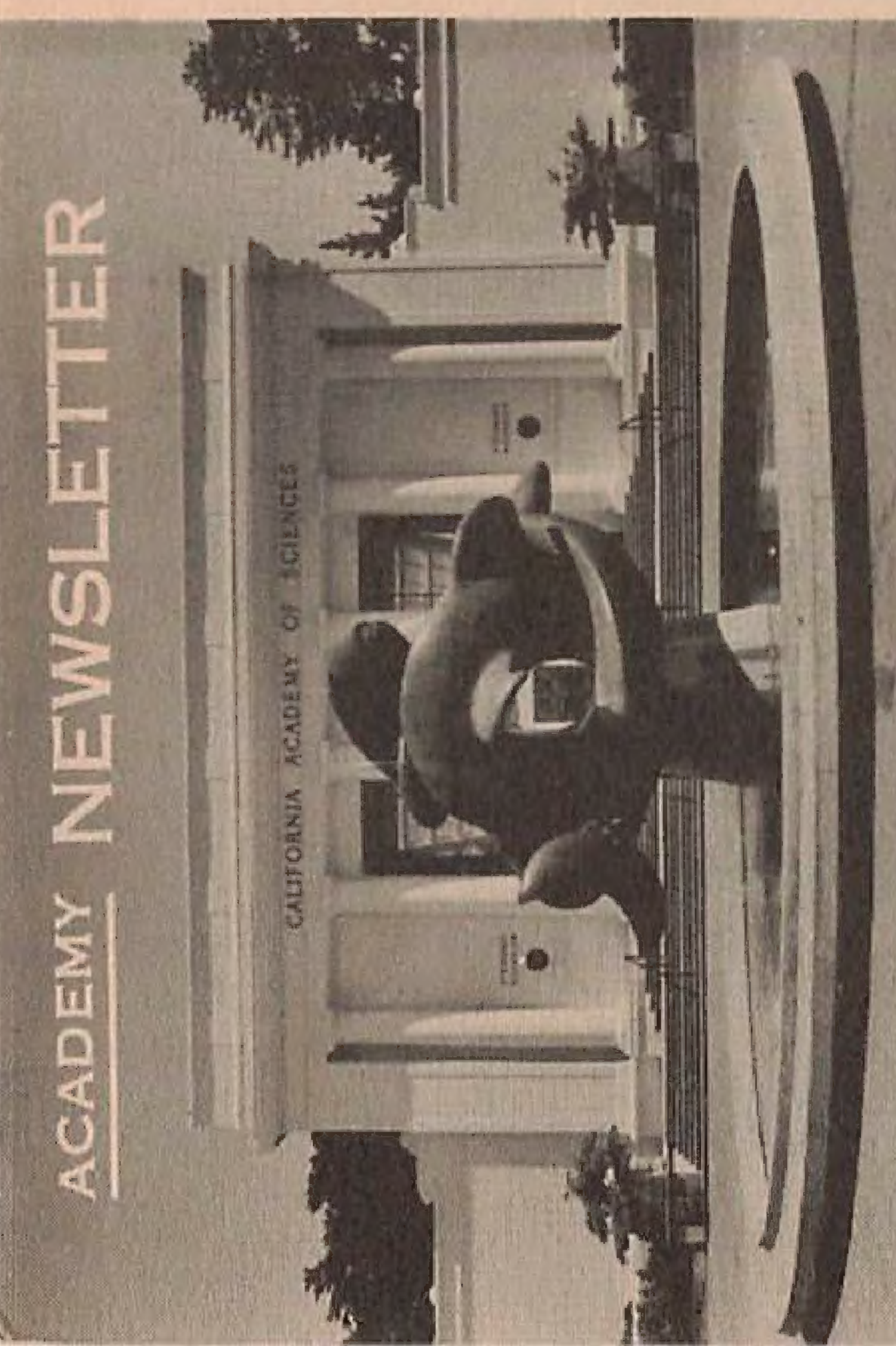
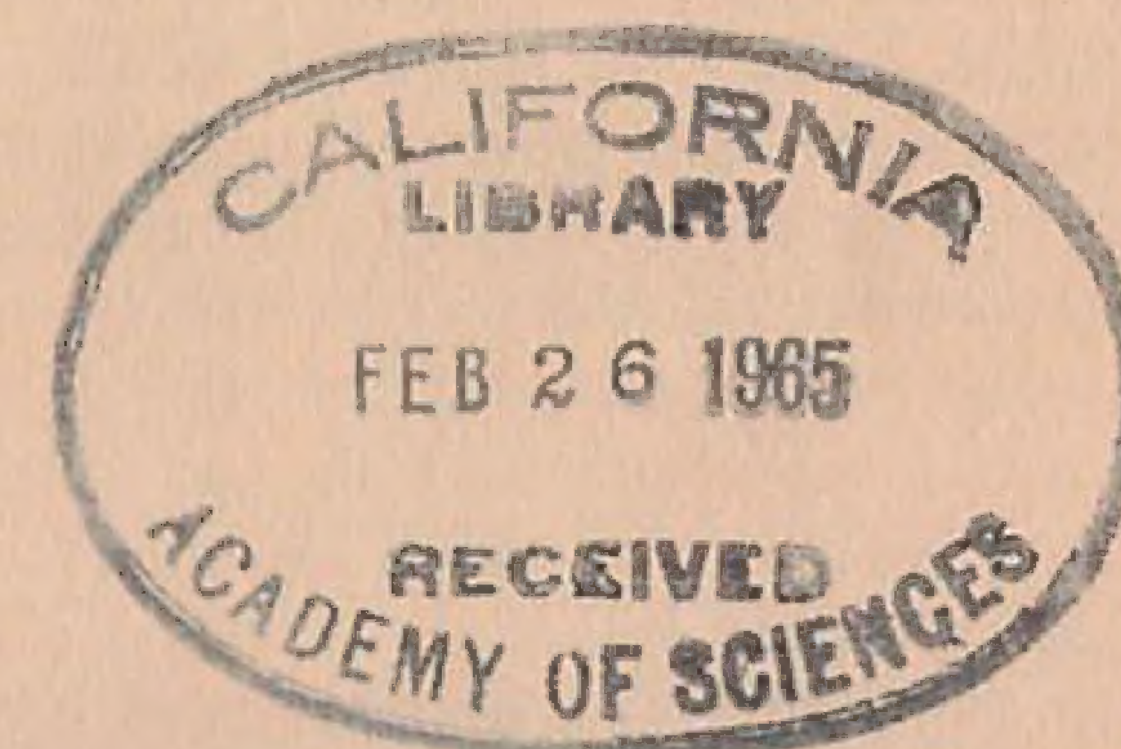
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